	Application No.	Applicant(s)
Office Action Summary	10/672,454	WU ET AL.
	Examiner	**Art Unit**	
	KUMIKO C. KOYAMA	2887	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>05 November 2007</u>.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) <u>1-42</u> is/are pending in the application.

    4a) Of the above claim(s) <u>15-19 and 23</u> is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) <u>1-14, 20-22 and 24-42</u> is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on <u>08 December 2004</u> is/are: a)☒ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All b)☐ Some * c)☐ None of:

        1.☐ Certified copies of the priority documents have been received.

        2.☐ Certified copies of the priority documents have been received in Application No. _____.

        3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
    Paper No(s)/Mail Date _____.

4) ☒ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. <u>20080202</u> .

5) ☐ Notice of Informal Patent Application

6) ☐ Other: _____.

DETAILED ACTION

Amendment received on November 05, 2007 has been acknowledged.

Continued Examination Under 37 CFR 1.114

1.   A request for continued examination under 37 CFR 1.114, including the fee set forth in

37 CFR 1.17(e), was filed in this application after final rejection. Since this application is

eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e)

has been timely paid, the finality of the previous Office action has been withdrawn pursuant to

37 CFR 1.114. Applicant's submission filed on November 05, 2007 has been entered.

Claim Rejections - 35 USC § 102

2.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the

basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3.   Claims 1, 20, 24, 34, 37 and 40 are rejected under 35 U.S.C. 102(b) as being anticipated

by Johnston (US 5,673,333).

        Re claims 1, 20 and 24: Johnston discloses a recognition and processing means 84 that

determines that a deposit item is a financial document of predetermined type, i.e., a cheque or

payment slip of a type recognized by the recognition and processing means 84, and that the

document the document has been fully completed (col 5, lines 45-50). Such recognition and

processing means is means for extracting data from the document to be routed. Johnston

discloses that the recognition and processing means 84 determines if the deposit item is a cheque

by ascertaining whether a sort code, an account number and a cheque number are present at

predetermined locations one side of the cheque. The recognition and processing means 84 also

determines if the deposit item is a payment slip by ascertaining whether certain information is

present at predetermined locations at both sides of the deposit item (col 5, lines 17-25). Such

determination of whether the deposit item is a cheque or a payment slip shows that the extracted

data includes a type of document, which comprises a predefined form associated with the

document. Johnston also discloses that in addition, the recognition and processing means 84

checks whether the deposit item has been fully completed by the user, e.g., by being signed,

dated and having amount information entered thereon in the case of a cheque (col 5, lines 25-30).

Such signature, date and amount information are considered as field names and associated data

values representing information from the document, and therefore, Johnston teaches a content of

the document. Johnston discloses that the user vies the image of the document on the screen 24

(col 5, lines 50-52). Such disclosure teaches the content of the document is routed to the display

screen for the user. Johnston discloses that if the recognition and processing means 84 fails to

recognize a deposit item as being either a cheque or a payment slip or an envelop, the deposit

item is driven back along the common feed path (col 6, lines 19-30). If the recognition and

processing means 84 determines that the deposit item is a cheque or payment slip, the feeding of

the document is resumed (col 6, lines 30-35). Such disclosure teaches means for routing the

document to desired locations depending on the type of the document.

Re claims 34, 37 and 40: As described above in Johnston, the document is extracted

based on whether a sort code, an account number and a cheque number are present at

predetermine locations on one side of the cheque (col 5, lines 18-22). Johnston also discloses that

the recognition and processing means 84 also determines if the deposit item is a payment slip by

ascertaining whether the certain information is present at predetermined locations on both sides

of the deposit item (col 5, lines 22-25). Such disclosures teaches that the document is extracted

based on a predefined form.

Claim Rejections - 35 USC § 103

4.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in
> section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are
> such that the subject matter as a whole would have been obvious at the time the invention was made to a person
> having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the
> manner in which the invention was made.

5.   Claims 2-4, 9, 21, 22, 25-28, 31-33, 35, 36, 38, 39, 41 and 42 are rejected under 35

U.S.C. 103(a) as being unpatentable over Johnston (US 5,673,333) in view of Melen (US

6,426,806).

Re claims 2, 3, 21, 22, 25 and 26: Johnston discloses a recognition and processing means

84 that determines that a deposit item is a financial document of predetermined type, i.e., a

cheque or payment slip of a type recognized by the recognition and processing means 84, and

that the document the document has been fully completed (col 5, lines 45-50). Such recognition

and processing means is means for extracting data from the document to be routed. Johnston

discloses that the recognition and processing means 84 determines if the deposit item is a cheque

by ascertaining whether a sort code, an account number and a cheque number are present at predetermined locations one side of the cheque. The recognition and processing means 84 also determines if the deposit item is a payment slip by ascertaining whether certain information is present at predetermined locations at both sides of the deposit item (col 5, lines 17-25). Such determination of whether the deposit item is a cheque or a payment slip shows that the extracted data includes a type of document, which comprises a predefined form associated with the document. Johnston also discloses that in addition, the recognition and processing means 84 checks whether the deposit item has been fully completed by the user, e.g., by being signed, dated and having amount information entered thereon in the case of a cheque (col 5, lines 25-30). Such signature, date and amount information are considered as field names and associated data values representing information from the document, and therefore, Johnston teaches a content of the document. Johnston discloses that the user vies the image of the document on the screen 24 (col 5, lines 50-52). Such disclosure teaches the content of the document is routed to the display screen for the user. Johnston discloses that if the recognition and processing means 84 fails to recognize a deposit item as being either a cheque or a payment slip or an envelop, the deposit item is driven back along the common feed path (col 6, lines 19-30). If the recognition and processing means 84 determines that the deposit item is a cheque or payment slip, the feeding of the document is resumed (col 6, lines 30-35). Such disclosure teaches means for routing the document to desired locations depending on the type of the document.

Johnston fails to specifically disclose comparing a data to one or more predetermined business rules.

Melen discloses that the CPU compares the tentative identifier (or the scanned control

sheet information) to the list of existing identifiers to determine whether any existing identifier

matches tentative identifier (col 3, lines 13-20).

Therefore, it would have been obvious to an artisan of ordinary skill in the art at the time

the invention was made to modify the teachings of Melen to the teachings of Johnston and

compare the scanned identifier with a list of existing identifiers because in order to accurately

route the document to its proper location, it is necessary that the proper user assigned instructions

and data are retrieved from the predetermined locations directed by the identifier and the

identifier must exists in order to do such accurate retrieval.

Re claim 4: Johnston discloses that if the recognition and processing means 84 fails to

recognize a deposit item as being either a cheque or a payment slip or an envelope, the

deposit item is driven back along the common feed path by the common transport section 34

and the diver gate remains in its home position so that the deposit item is returned to the

entry slot 14 for collection by the user (col 6, lines 19-30).

Re claims 9 and 28: Johnston fails to teach that the scanning means utilizes at least one of

an OCR, Image-character recognition technique, and an optical mark recognition technique.

Melen discloses that the scanned control sheet information is read out of the scan storage

memory and interpreted by the OCR (col 2, lines 50-52).

Therefore, it would have been obvious to an artisan of ordinary skill in the art at the time

the invention was made to modify the teachings of Melen to the teachings of Johnston and

perform an OCR technique to the scanned document because by converting the scanned

document into ASCII characters, the document can be search using keywords typed in by a person and can provide an additional retrieval function to the document database.

Re claim 27: As described above in Johnston, Johnston discloses that the document is a cheque or a payment slip, which is a physical media.

Re claims 31-33: As described above in Johnston, Johnston discloses that the recognition and processing means 84 checks whether the deposit item has been fully completed by the user (col 5, lines 25-30).

Re claims 35, 36, 38, 39, 41 and 42: As described above in Johnston, the document is extracted based on whether a sort code, an account number and a cheque number are present at predetermine locations on one side of the cheque (col 5, lines 18-22). Johnston also discloses that the recognition and processing means 84 also determines if the deposit item is a payment slip by ascertaining whether the certain information is present at predetermined locations on both sides of the deposit item (col 5, lines 22-25). Such disclosures teaches that the document is extracted based on a predefined form.

6.   Claims 5 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Johnston in view of Melen as applied to claim 3 above, and further in view of Rudak (US 5,014,329). The teachings of Johnston as modified by Melen have been discussed above.

Johnston as modified by Melen fails to teach means for converting the compliant data into a determined output file format and fails to teach that the output file format is one of ASCII text, ANSI X.12, EDIFACT, XML, EANCOM, TRADACOMS, ODETTE, and a customer-specified format.

Rudak teaches that an electronic image of the text is processed by the OCR algorithm, where the characters of interest are converted to ASCII data (col 1, lines 44-46).

Therefore, it would have been obvious to an artisan of ordinary skill in the art at the time the invention was made to integrate the teachings of Rudak to the teachings of Johnston as modified by Melen such that the document can be easily edited and displayed by a computer to further update the document to date.

7.   Claims 6-8, 11, 14, 29 and 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Johnston in view of Melen as applied to claims 3 and 26 above, and further in view of Wright et al (US 6,674,924). The teachings of Johnston as modified by Melen have been discussed above.

Re claims 6, 11 and 14: Johnston as modified by Melen fails to teach means for archiving the compliant data into a database and fails to teach that the archiving means stores and indexes the data in the database so that the data may be searched for and retrieved. Johnston as modified by Melen also fails to teach means for querying the archive database.

Wright discloses indexing a document is the processing assigning a meta-data, thereby describing the document and/or the contents of the document, and using the computer to capture the meta-data. The meta-data, or indexing information, is stored in a record in an image index database at the time of indexing. System 100 generates or coordinates a globally unique image document identifier (col 7, lines 7-16). Wright discloses an image repository 226 that can be a directory of subdirectory or a series of directories or subdirectories containing a series of images where each image has a globally unique document identifier, taken from the pre-printed labels or alternatively, created and assigned. The image repository 226 may be a structured query

language compatible database file capable of storing records containing images (col 14, lines 10-18). Wright also discloses that the image index database 228 which is a database used to store indexing information for the document images is also a structured query language (SQL) compatible data base file capable of storing information, including indexed document names, for the images stored in image repository (col 14, lines 47-53).

Therefore, it would have been obvious to an artisan of ordinary skill in the art at the time the invention was made to modify the teachings of Wright to the teachings of Johnston as modified by Melen because archiving and indexing the data in database eliminates the need to store the physical document, which requires a lot of space, and also provides a backup in case other financial institutions requires the image of the document. Such modification also increases speed of transmitting and retrieving the documents images for faster process.

Re claims 7 and 8: Johnston as modified by Melen fails to teach that the document is obtained from an e-mail, a facsimile, or a file transferred by a file transfer protocol, and fails to teach that the document is a facsimile, at least one dedicated inbound telephone number is provided therefor.

Wright further discloses that the document receiver can be adapted to receive document images by fax, and also teaches a connection for a telephone access and dial-up phone connection (col 6, lines 60-col 7, lines 6).

Therefore, it would have been obvious to an artisan of ordinary skill in the art at the time the invention was made to modify the teachings of Wright to the teachings of Johnston as modified by Melen such that routing system can also be utilized for facsimile document because facsimile provides the capability of receiving an image of a document at a remote location, and therefore,

an check can be received at a remote location and the image can be transferred via facsimile.

Such modification provides the convenience of a user to deposit a check at a remote location and

be processed elsewhere.

Re claims 29 and 30: Johnston as modified by Melen fails to teach tagged image file format,

portable document format or a facsimile image. Johnston as modified by Melen also fails to

teach converting the extracted data into one file format if the extracted data is to be used with

one type of program or another file format if the extracted data is to be used with another type of

program.

Wright discloses a tagged image format (TIFF) and a portable document format (PDF) (col

16, lines 24-27). Wright further discloses that the document receiver receives the document,

determines if a conversion is needed, and performs the conversion to the desired file format (col

16, lines 25-30).

Therefore, it would have been obvious to an artisan of ordinary skill in the art at the time

the invention was made to modify the teachings of Wright to the teachings of Johnston as

modified by Melen such that the routing system can be utilized for purposes other than checks

and payment slips to expand its use into electronic documents, such as e-mail and facsimile

documents because the use of these electronic documents have become a popular communication

method that can also be used world wide in a faster manner.

8.   Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Johnston in view

of Melen as applied to claim 3 above, and further in view of Wing (US 6,650,440). The

teachings of Johnston as modified by Melen have been discussed above.

Johnston as modified by Melen fails to teach that the routing means utilizes a message

transport protocol selected from the list consisting of HTTP, SMTP, and FTP or secured variants

thereof.

Wing teaches a Simple Mail Transfer Protocol (SMTP) servers for routing e-mail to and

from different computer networks (col 8, lines 50-52).

Therefore, it would have been obvious to an artisan of ordinary skill in the art at the time

the invention was made to integrate the teachings of Wing to the teachings of Johnston as

modified by Melen in order to route the document data to a remote location where there is a

larger capacity database, such that all the document data in the same routing location are

combine in one database to help the organization.

9.   Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Johnston in view

of Melen as applied to claim 3 above, and further in view of Ett (US 5,227,893). The teachings

of Johnston as modified by Melen have been discussed above.

Johnston as modified by Melen fails to teach means for generating billing records.

Ett teaches a pseudo-bar code control of image transmission utilizing in a trucking

company that generates or receives from the shipper several forms such as bills of lading (col 8,

lines 52-55).

Therefore, it would have been obvious to an artisan of ordinary skill in the art at the time

the invention was made to integrate the teachings of Ett to the teachings of Johnston as modified

by Melen in order to utilize Melen's system in various different environments and business to

widen the use to increase users and buyers of the products or system.

Response to Arguments

10.   Applicant's arguments filed November 05, 2007 have been fully considered but they are

not persuasive.

Applicant submits that Johnston does not disclose a system that extracts content of a

document including one or more "field names and associated data values representing

information from the document." Specifically, Applicant submits that Johnston generates a two-

dimensional digital image of a document and extracts only data values from the digital image

such as a sort code or an account number. However, the Examiner respectfully disagrees. As

provided in the Office Action, Page 4, the Examiner indicated that Johnston discloses that the

recognition and processing means 84 checks whether the deposit items has been fully completed

by the user, e.g., by being signed, dated and having amount information entered thereon in case

of a cheque. And the Examiner further writes that such signature, date and amount information

are considered as field names and associated data values representing information from the

document, and therefore, Johnston teaches a content of the document. In this case, the signature

represents field names, and the date and the amount represent the associated data values.

Therefore, the Examiner believes that Johnston teaches the recited limitation.

Furthermore, the Applicant submits that Johnston fails to disclose a system for "routing

the content of the document and the document." However, the Examiner respectfully disagrees.

Johnston discloses that the image of the document is displayed on the display. Such disclosure

teaches that the content of the document is routed. The Applicant submits that the Johnston does

not route the extracted data. However, the image of the document includes the extracted data as

part of the image. When the image of the document is displayed, the extracted data, e.g., a sort

code, an account number, a cheque number, signature, date and amount, are all displayed as part

of the image. Therefore, the content of the image is routed to the display. The document is also

routed because if the recognition and the processing means 84 determines that the deposit item is

a cheque or payment slip, the feeding of the document is resumed. Since the feeding of the

document is resumed, the document is routed or transported to another location by the feeding

means. Therefore, Johnston teaches routing the document.

Applicant further submits that claim 22 has introduced additional limitations which

further differentiate over the prior art. However, the Examiner believes that the newly submitted

claim 22 can still be read by Johnston and therefore, maintains the rejection.

Conclusion

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to KUMIKO C. KOYAMA whose telephone number is (571)272-

2394. The examiner can normally be reached on Monday-Friday 8am-4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Steve Paik can be reached on 571-272-2404. The fax phone number for the

organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Kumiko C. Koyama/
Examiner, Art Unit 2887